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Response to Office Action dated 18 November 2008

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A LISTING OF THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1 – 27 (Cancelled)

28. (Previously Presented) A method for managing data that may be replicated from one or more volumes of data that are part of a first volume group on a first computer system having a first operating system, first internal logical volume, and first filesystem, the method comprising the computer-executed steps of:

discovering logical information related to the one or more volumes of data that are part of the first volume group on the first computer system;

creating a map of the logical information to physical devices on the first computer system, the map defining a first logical configuration comprising:

information identifying one or more devices associated with one or more physical volumes containing the data, including device serial number, physical address of the device, volume group, logical volume name, file type, and mount point; and

information providing definition and structured layout of the first volume group[s], first internal logical volumes and first file systems on the first computer system;

using the map to create a second volume-group on a second computer system having a second operating system, where the logical configuration of the second volume group is identical to the first logical configuration of the first volume group, including identical volume layout and

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file system structure as defined by mapping information originally built on the first computer system; and

using the map to reconstruct on the second computer system the internal logical volumes and file systems of the first computer system; and

mounting and mount a duplicate of the one or more volumes of data of the first computer system to the second volume group of on the second computer system.

29. (Currently Amended) The method of claim 28, wherein the first computer has a first operating system and wherein the second computer has a second operating system, wherein the first and second operating systems are selected from the group consisting of IBM AIX, Sun Solaris, and HP UX, and the computer-executed steps may be performed substantially independent of which operating system is selected from the group.

30. (Currently Amended) The method of claim 29, wherein the map is configured as a flat file that is converted into a tree structure and further comprising the computer-executed step of using the tree structure to verify the accuracy of the information related to the map of the first volume group and the other logical information associated with the first computer system.

31. (Previously Presented) The method of claim 30, wherein the tree structure is converted back into a map that is sent to the second computer system.

32. Cancelled

33. (Previously Presented) The method of claim 32, further comprising the computer-executed steps of:

establishing one or more mirrored copies of data that are copies of one or more volumes of data that are part of the first volume group; and

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separating the one or more mirrored copies of data from the respective one or more volumes of data.

34. (Previously Presented) The method of claim 33, further comprising the computer-executed step of mounting the separated one or more mirrored copies of data on the first or second computer system using the second volume group.

35. (Currently Amended) The method of claim 34, wherein the first and second computer systems share a data storage system, where the first volume group and the second volume group are both part of the data storage system. ~~are combined.~~

36. (Previously Presented) The method of claim 34, further comprising the computer-executed step of:

dismounting the separated one or more mirrored copies from the second computer system.

37. (Currently Amended) The method of claim 33, further comprising the computer-executed step of:

backing up the separated one or more mirrored copies of data to a backup storage system ~~in operable communication with the first and second computer systems medium.~~

38. (Currently Amended) The method of claim 37, further comprising the computer-executed step of:

restoring one or more volumes of data from the backup storage system medium ~~or from the one or more mirrored copies of data that are copies of the one or more volumes of data that are part of the first volume group.~~

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39. (Previously Presented) The method of claim 33, wherein the respective one or more volumes of data that are part of the first volume group on the first computer system are further associated with a first software application.

40. (Previously Presented) The method of claim 39, wherein a second software application is provided on the second computer system and the separated one or more mirrored copies of data on the second computer system are associated with the second software application.

41. (Currently Amended) The method of claim 40, further comprising the computer-executed step of:

backing up the separated one or more mirrored copies of data to a backup storage system in operable communication with at least one of the first and second computer systems medium.

42. (Currently Amended) The method of claim 41, wherein the second software application has an associated database and the step of backing up the separated one or more mirrored copies of data to thea backup storage systemmedium includes backing up the associated database.

43. (Currently Amended) The method of claim 42, wherein there is a set of information associated with the database, the set of information comprising at least one type of information selected from the group consisting of tablespaces, archive logs, redo logs, and control files, and wherein at least some of the set of information associated with the database is backed up to the backup storage systemmedium during the backup step.

44. (Previously Presented) The method of claim 43, further comprising the step of:
restoring, from the separated one or more mirrored copies of data, the respective one or more volumes of data associated with the separated one or more mirrored copies of data, and

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wherein at least some of the set of information associated with the database is used during this step.

45. (Currently Amended) A computer system for managing data that may be replicated from one or more volumes of data, the computer system comprising:

a data storage system including a plurality of storage devices;

first and second computer systems in communication with the data storage system, the first computer system having a first operating system and the second computer system having a second operating system, wherein the first computer system has data that may be replicated from one or more volumes of data that are part of a first volume group on the first computer system; and

a backup storage system in operable communication with the data storage system and the first and second computer systems, the backup storage system comprising computer-executable logic that enables the method steps of:

discovering logical information related to the one or more volumes of data that are part of the first volume group on the first computer system;

creating a map of the logical information to physical devices on the first computer system the map defining a first logical configuration comprising:

information identifying the devices associated with one or more physical volumes containing the data, including device serial number, physical address of the device, volume group, logical volume name, file type, and mount point; and,

information providing definition and structured layout of the first volume group[s], first internal logical volumes and first file systems on the first computer system;

using the map to create a second volume group on a second computer system ~~having a second operating system~~, where the logical configuration of the second volume group is identical to the first logical configuration of the first volume group, including

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identical volume layout and file system structure as defined by mapping information originally built on the first computer system; and

using the map to reconstruct on the second computer system the internal logical volumes and file systems of the first computer system; and

mounting mount-a duplicate of the one or more volumes of data of the first computer system to the second volume group of on the second computer system having a second operating system.

46. (Previously Presented) The system of claim 45, wherein the first and second operating systems are selected from the group consisting of IBM AIX, Sun Solaris, and HP UX, and the computer-executed steps may be performed substantially independent of which operating system is selected from the group.

47. (Currently Amended) The system of claim 46, wherein the map is configured as a flat file that is converted into a tree structure and further comprising the computer-executed step of using the tree structure to verify the accuracy of the information related to the map of the first volume group and the other logical information associated with the first computer system.

48. (Previously Presented) The system of claim 47, wherein the tree structure is converted back into a map that is sent to the second computer system.

49. Cancelled.

50. (Previously Presented) The system of claim 49, further comprising the computer-executed steps of:

establishing one or more mirrored copies of data that are copies of one or more volumes of data that are part of the first volume group; and

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separating the one or more mirrored copies of data from the respective one more volumes of data.

51. (Previously Presented) The system of claim 50, further comprising the computer-executed step of mounting the separated one or more mirrored copies of data on the first or second computer system using the second volume group.

52. (Currently Amended) The system of claim 51, wherein the first and second computer systems share the data storage system, where the first volume group and the second volume group are both part of the data storage system. ~~are combined.~~

53. (Previously Presented) The system of claim 51, further comprising the computer-executed step of:

dismounting the separated one or more mirrored copies from the second computer system.

54. (Currently Amended) The system of claim 49, further comprising the computer-executed step of:

backing up the separated one or more mirrored copies of data to the backup storage system ~~a backup medium.~~

55. (Currently Amended) The system of claim 50, further comprising the computer-executed step of:

restoring one or more volumes of data from the backup storage system ~~medium~~ or from the one or more mirrored copies of data that are copies of the one or more volumes of data.

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56. (Currently Amended) A program product for use with a data storage system having a plurality of storage devices and which is in communication with first and second computer systems, the program product being for management of data and being comprised of:

computer-executable logic contained on a computer-readable storage medium and which is configured for causing the following computer-executed steps to occur:

establishing one or more mirrored copies of data that are copies of one or more volumes of data that are part of a first volume group on a first computer system having a first operating system;

separating the one or more mirrored copies of data from the respective one more volumes of data;

discovering logical information related to the one or more volumes of data that are part of the volume group on the first computer system;

creating a map of the logical information to physical devices on the first computer system, the map defining a first logical configuration comprising:

information identifying the devices associated with one or more physical volumes containing the data, including device serial number, physical address of the device, volume group, logical volume name, file type, and mount point; and

information providing definition and structured layout of the first volume group[s], first internal logical volumes and first file systems on the first computer system;

using the map to create a second volume group on a second computer system having a second operating system, where the second logical configuration of the second volume group is identical to the first logical configuration of the first volume group, including identical volume layout and file system structure as defined by mapping information originally built on the first computer system; and

using the map to reconstruct on the second computer system the internal logical volumes and file systems of the first computer system; and

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mounting mount a duplicate of the one or more mirrored copies of data of the first computer system to the second volume group of on the second computer system.

57. (Previously Presented) The program product of claim 56, wherein the map further comprises: information identifying the one or more separated mirrored copies of the data; and information identifying the physical address(es) of the mirrored copies.

58. (Currently Amended) The program product of claim 56, wherein first computer has a first operating system and wherein the second computer has a second operating system, wherein the first operating system is different from the second operating system.

59. (Previously Presented) The method of claim 28, wherein the map further comprises at least one set of information selected from the group consisting of information relating to one or more filesystems associated with the volumes of data, device serial number, physical address, volume group, logical volume name, file type, and mount point.

60. (Currently Amended) The method of claim 29 [28], wherein the first operating system is different from the second operating system.

61. (Currently Amended) The method of claim 29 [28], wherein the first operating system is substantially the same as the second operating system.

62. (Previously Presented) The method of claim 28, wherein the first computer system is a separate and distinct computer system from the second computer system.

63. (Previously Presented) The method of claim 28, further comprising creating volume group, logical volume, and file system objects on the second computer system.

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64. (Previously Presented) The method of claim 33, wherein the map further comprises: information identifying the one or more separated mirrored copies of the data; and information identifying the physical address(es) of the mirrored copies.

65. (Previously Presented) The computer system of claim 45, wherein the first operating system is different from the second operating system.

66. (Previously Presented) The computer system of claim 45, wherein the first operating system is substantially the same as the second operating system.

67. (Previously Presented) The computer system of claim 45, wherein the first computer system is a separate and distinct computer system from the second computer system.

68. (Previously Presented) The method of claim 50, wherein the map further comprises: information identifying the one or more separated mirrored copies of the data; and information identifying the physical address(es) of the mirrored copies.